



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,172	02/27/2004	Shin-ichi Uehara	Q80096	4907
23373	7590	09/26/2007		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER FINEMAN, LEE A	
			ART UNIT 2872	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/787,172

Applicant(s)

UEHARA ET AL.

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 15, 16 and 44-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15, 16 and 44-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to an amendment filed 17 July 2007 in which claims 1-5 and 15-16 were amended and claims 44-48 were added. Claims 1-5, 15-16 and 44-48 are pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 15, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Snaper et al., US 4,140,370 (henceforth Snaper).

Regarding claims 1 and 44, Snaper discloses in fig. 14 an image display device (unnumbered) comprising: a display panel (unnumbered) which has a plurality of pixel sections each of which includes at least a pixel displaying an image for the first viewpoint and a pixel displaying an image for the second viewpoint, said pixel sections being provided periodically in one direction (see column 4, lines 9-12); an optical unit (66 and 68) which refracts the light emitted from said pixels and emits the light in directions different from each other (column 4, lines 44-47), and a fixing unit (column 7, lines 31-32), which is an adhesive, and is provided on at least a part (70) of an area (68) enclosing an image display area of said display panel (fig. 14) to fix the optical unit and the display panel in line (fig. 14), wherein a gap (see fig. 14, inherently when area 68 adheres to the frame of the display (column 7, lines 28-33) there will be a gap

Art Unit: 2872

between the lenticular lenses 66 and the screen of the display) is formed between said display panel (unnumbered) and said optical unit (66 and 68) in the image display area (fig. 14).

Regarding claim 2, Snaper further discloses wherein said optical unit is a lenticular lens (66) having a plurality of semicylindrical lenses (e.g., fig. 10), longitudinal direction of which is perpendicular to said one direction (fig. 10), and said fixing unit (not shown, on periphery 70) is provided along a side extending in a longitudinal direction of said semicylindrical lens in said optical unit (fig. 14).

Regarding claims 3 and 15, Snaper further discloses wherein said optical unit is a lenticular lens (66) having a plurality of semicylindrical lenses (e.g., fig. 10), longitudinal direction of which is perpendicular to said one direction (fig. 10), and said fixing unit (not shown, on periphery 70) is provided along the side extending in a direction orthogonal to the longitudinal direction of said semicylindrical lens in said optical unit (fig. 14).

Regarding claim 45, Snaper further discloses wherein the fixing unit (not shown, on periphery 70) is provided along at least two sides of the optical unit (fig. 14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snaper in view of Eichenlaub, US 5,410,345.

Art Unit: 2872

Snaper discloses the claimed invention except wherein the optical unit is a fly-eye lens having a plurality of convex lenses in which a lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other. Eichenlaub teaches in fig. 13 that fly-eye lenses (178) with the lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other are a well known lens array in the stereoscopic art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a fly-eye lens with the lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other as taught by Eichenlaub in the system of Snaper as they are commonly available and easy to obtain type of lens array. Therefore, said fixing unit (not shown, on periphery 70) is provided both along the side orthogonal to the short side of said optical unit and along a short side of said optical unit.

5. Claims 46, 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snaper in view of Takahashi et al., US 4,921,330 (henceforth Takahashi).

Snaper discloses the claimed invention except for explicitly stating wherein the fixing unit is provided to install the optical unit on the display panel, without intentionally moving a positional relationship between the optical unit and the display panel, while permitting a displacement of the optical unit due to expansion and contraction of a material of the optical unit; wherein the fixing unit is provided to install the optical unit on the display panel such that a positional relationship between the optical unit and the display panel is maintained while permitting a difference in expansion or contraction between the optical unit and the display panel; and a means for fixing the optical unit to the display panel such that an unfixed part

Art Unit: 2872

between the optical unit and the display panel may be deformed to absorb stress. Takahashi teaches in fig. 2, providing a fixing unit (8) to install an optical unit (S) on a display panel (1) such that a positional relationship between the optical unit and the display panel is maintained or without intentionally moving a positional relationship between the optical unit and the display panel while permitting a difference in expansion or contraction between the optical unit and the display panel (see column 5, line 9-column 6, line 15) and such that an unfixed part (bottom of screen S) between the optical unit and the display panel may be deformed to absorb stress (see column 5, line 9-column 6, line 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fixing unit as taught by Takahashi in the system of Snaper to avoid undulation and swelling between the system elements (Takahashi, column 3, lines 39-42).

Response to Arguments

6. Applicant's arguments with respect to claims 1-5, 15-16 and 44-48 have been considered but are moot in view of the new ground(s) of rejection.

7. It is noted by the Examiner that the claim objections made in the previous Office Action have been withdrawn due to amendment by the Applicant.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

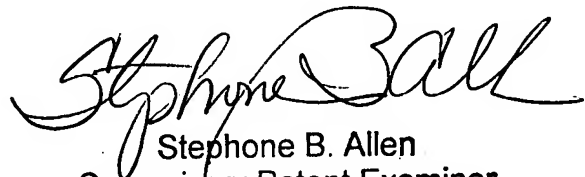
Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LAF

18 September 2007



Stephone B. Allen
Supervisory Patent Examiner